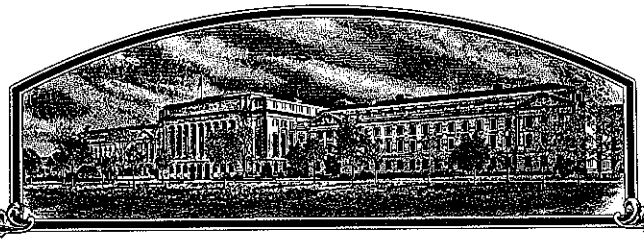
No. 9000202



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ferry-Morse Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'Promo'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 30th day of November in the year of our Lord one thousand nine hundred and ninety-two.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Edward Madigan
Secretary of Agriculture

FORM APPROVED: OMB 0581-0055, Expires 1/31/91

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
FERRY-MORSE SEED COMPANY

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.
FM 83568

3. VARIETY NAME
PROMO

4. ADDRESS *(street and no. or R.F.D. no., city, state, and ZIP)*
P.O. BOX 4938
MODESTO, CALIFORNIA 95352

5. PHONE *(Include area code)*
(209) 579-7333

FOR OFFICIAL USE ONLY

PVPO NUMBER
9000202

FILING
Date: June 8, 1990
Time: ☐ A.M. ☐ P.M.

FEES RECEIVED
Filing and Examination Fee: $ 2150.-
Date: May 29, 1990
Certificate Fee: $ 250.00
Date: Nov. 2, 1992

6. GENUS AND SPECIES NAME
Lycopersicon esculentum Mill.

7. FAMILY NAME *(Botanical)*
SOLANACEAE

8. CROP KIND NAME *(Common Name)*
TOMATO

9. DATE OF DETERMINATION
OCTOBER 1989

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
CORPORATION

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
CALIFORNIA

12. DATE OF INCORPORATION
7 APRIL 1969

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
DR. LARRY GAUTNEY
FERRY-MORSE SEED COMPANY
P.O. BOX 1010
SAN JUAN BAUTISTA
CALIFORNIA 95045

PHONE *(Include area code)*: (408) 637-7461

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*

a. [X] Exhibit A, Origin and Breeding History of the Variety.
b. [X] Exhibit B, Novelty Statement.
c. [X] Exhibit C, Objective Description of Variety.
d. [X] Exhibit D, Additional Description of Variety.
e. [X] Exhibit E, Statement of the Basis of Applicant's Ownership.
f. [X] Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office _____.
g. [X] Filing and Examination Fee ($2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See section 83(a) of the Plant Variety Protection Act.)*
☐ YES *(If "YES," answer items 16 and 17 below)* ☒ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☒ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION (N/A) ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES *(If "YES," through* ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____.)
☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ YES (If "YES," give names of countries and dates) U.S. - FERRY-MORSE PRICE LIST (3/15/90)
☐ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *[Owner(s)]*	CAPACITY OR TITLE	DATE
Larry Gautney	Vice President Research	10 August 1990
SIGNATURE OF APPLICANT *[Owner(s)]*	CAPACITY OR TITLE	DATE

9000202

VARIETY: PROMO formerly FM83568

EXHIBIT A: Origin and Breeding History of the Variety

Promo was developed using the pedigree method of breeding, from a Ferry Morse cross made at San Juan Bautista, CA in July of 1975 between 10C-X629MsC10Ms, a Ferry-Morse breeding line and UC82-1-3Ms from Davis, California. The parentage of 10C-X629...included UC90-1, VF Roma, and Chico. UC82...was selected out of a cross of UC130 x UC122 at Davis.

F_1 plants were compact, medium sized determinate with a heavy set of medium-small elongated (half-long) fruit which were uniformly green while immature. F_2 seeds from several F_1 plants were harvested from field row #42900 in October of 1976 at San Juan Bautista, California.

F_2 plants in 1977 had very good crops of medium early maturing, firm and tough, square-round or pear fruit all uniform green while immature. There was obvious segregation for curly foliage and fruit shape. F_3 seeds were harvested from five selected plants in field row #51681 in October of 1977 at San Juan Bautista, California.

F_3 plant progenies of the five selected plants were noted in 1978, and the second progeny row had the best combination of fruit type, set, firmness and lab quality including high soluble solids. Nine single plant selections were harvested from this row #60294 in October of 1978. Segregation for fruit type occurred with square-round, half-long and pear shapes apparent.

In 1979, the F_4 progeny from selection #3 looked good at San Juan Bautista. It was medium early, and heavy yielding with elongated fruit that were very firm with good soluble solids and pH. A small mass of F_5 seeds were harvested from a few fruit from each plant in row #67370 in October of 1979. No fruit rotting (black mold) or cracking was apparent in this row after several rains.

In 1980, the F_5 progeny had excellent fruit quality but noticeable segregation for fruit shape including plum, half-long and pear. Six single plant selections were harvested from this row #76375 in October of 1980.

In 1981, the F_6 generation progeny from selection #4 had an excellent crop of half-long fruit on a compact vine that was neither rangy nor floffy. Seed was harvested from all 35 plants of this row # 83568 to be used in more extensive trials in 1982.

In 1982, this F_7 generation lot (83568-Ms) was placed in trials in Dixon and Davis, CA as well as San Juan Bautista. FM83568 compared very favorably with Cannery Row, a closely related Ferry Morse development, and FM6203. The vine type and foliage cover were better than Cannery Row and the fruit were much less puffy than M6203.

In 1983, FM83568 was placed in yield trial at San Juan Bautista along with Cannery Row, FM6203, and VF145-B7879. It was quite similar to Cannery Row but had better foliage cover of the fruit, more concentrated maturity, and slightly earlier maturity. The fruit were slightly shorter, and fewer stems were retained on fruit shaken from the vine. The fruit quality was very similar to FM6203 but the FM83568 fruit was firmer, smaller and much less puffy. The fruit of "7879" was much softer with more cracks and stems on the fruit.

Trials throughout central California in 1984 through 1989 have shown that Promo (FM83568) has similar soluble solids and pH to Cannery Row and FM6203 but higher solids and pH than UC82B. The fruit of Promo was also much less puffy than FM6203 or UC82B. Promo yields have been at least as good as Cannery Row, FM6203 and UC82B. Each year Promo fruit has exhibited outstanding resistance to black mold and cracking at San Juan Bautista following late September and early October rains.

Moderate seed increases of FM83568 were made during 1983, 1984 and 1985 consisting of a few hundred plants each year to provide seed for cannery trials. Each year the variety was found to be very uniform and stable with no obvious off type plants or fruit. A larger increase of seed was made in 1988 with 3,000 plants. Again the variety was found to be very uniform and stable with no obvious off types plants or fruit.

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VARIETY: PROMO, formerly FM-83568

EXHIBIT B: Novelty Statement

Promo is most similar to Cannery Row since it originated from the same cross made in 1975. The length over diameter, L/D ratio, of the fruit can be used to distinguish Promo fruit from the fruit of each parent since the L/D ratio for Promo 1.34 is intermediate between those of the parents 1.53 & 1.18. Promo and Cannery Row have very similar L/D ratios.

Promo can be clearly distinguished from Cannery Row on the basis of # of flowers in the third inflorescence. Promo inflorescences have consistently fewer flowers per inflorescence as shown in the following table:

VARIETY	CALIFORNIA		WISCONSIN		
	1986	1989	1986	1989	Ave.
PROMO	5.5	6.3	5.5	5.9	5.80
CANNERY ROW	7.1	8.2	6.3	7.4	7.25
UC82B	6.1	6.8	6.2	5.4	6.12

Experimental Procedure: Plants of each variety to be compared were grown in adjacent rows. Each row consisted of 50 plants transplanted at one foot spacing with five feet between rows. The flowers on the third inflorescence of each plant were counted for the data used in these comparisons.

VARIETY: PROMO, formerly FM-83568

EXHIBIT B: Novelty Statement

When significant departures from a normal distribution of the data occurred, a non-parametric test, the Mann-Whitney U-test, was applied to test for significance of differences between the compared variety samples.

Summary of Results:

TRIAL #	LOCATION & YEAR	NO. OF FLOWERS IN 3RD INFLORESCENCE		
		PROMO $\bar{x}$	CANNERY ROW $\bar{x}$	DIFFERENCE OF $\bar{x}$'s
1	San Juan Bautista CA, 1986	5.50	7.06	1.56
2	Sun Prairie WI, 1986	5.54	6.40	0.86
3	San Juan Bautista CA, 1989	6.31	8.21	1.90
4	Sun Prairie WI, 1989	5.87	7.43	1.56

The 1988 data reported in the original application was from the progeny of a single plant selection out of Promo. It was discarded because of reduced yield of the selection.

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Tomato)

OBJECTIVE DESCRIPTION OF VARIETY

TOMATO *(Lycopersicon esculentum* Mill.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Ferry-Morse Seed Company	FM83568	Promo

ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
555 Codoni Avenue
Modesto, CA 95355

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PVPO NUMBER
9000202

Choose responses for the following characters which best fit your variety. Complete this form as fully as possible for best characterization of the variety. When a single quantitative value is requested (e.g., fruit weight), your answer should be the mean of an adequate-sized, unbiased sample of plants. Use leading zeroes when necessary (e.g., [0][9] or [0][8][1], etc.). The applicant variety should be compared with at least one well-known standard check variety of the same type (see list of recommended check varieties below), and grown in the same trials. The characters on this form should be described from plants grown under normal conditions of culture for the variety. Indicate by a check whether trial data are from greenhouse ____ or field X plantings. Trials direct-seeded ____ or transplanted X ; staked ____ or unstaked X . Give locations and dates of seeding and transplanting here:
San Juan Bautista, CA seeded 3/31/88 transpl 5/6/88 Sun Prairie, Wis seed 4/27/88 trans 6/1/88
San Juan Bautista, CA seeded 3/31/89 transpl 5/10/89 Sun Prairie, Wis seed 4/20/89 trans 6/2/89

COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VARIETIES IN THE FOLLOWING LIST, IF AT ALL POSSIBLE. ENTER THE **NUMBER** *OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUESTED.*

1 = Ace 55 VF
2 = Campbell 37
3 = Chico III
4 = Flora Dade
5 = Florida MH-1
6 = Heinz 1350
7 = Homestead 24
8 = Marglobe
9 = Murietta
10 = New Yorker
11 = Ohio MR-13
12 = Red Cherry Large
13 = Red Rock
14 = Roma VF
15 = Rutgers
16 = Sunray
17 = Tropic
18 = UC 82
19 = VF 134
20 = US 28
21 = VF 145 B 7879
22 = Other *(Specify)* Cannery Row
23=Butte

1. SEEDLING:

[2] Anthocyanin in hypocotyl of 2-15 cm. seedling: 1 = Absent 2 = Present

[1] Habit of 3-4 week old seedling: 1 = Normal 2 = Compact

2. MATURE PLANT (at maximum vegetative development):

[ ][ ][ ] Cm. Height

[2] Growth: 1 = Indeterminate 2 = Determinate

[2] Form: 1 = Lax, open 2 = Normal 3 = Compact 4 = Dwarf 5 = Brachytic

[2] Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large

[1] Habit: 1 = Sprawling (decumbent) 2 = Semi-erect 3 = Erect ('Dwarf Champion')

3. STEM:

[2] Branching: 1 = Sparse ('Brehm's Solid Red', 'Fireball') 2 = Intermediate ('Westover') 3 = Profuse ('UC 82')

[ ] Branching at cotyledonary or first leafy node: 1 = Present 2 = Absent

[3] No. of nodes below the first inflorescence: 1 = 1-4 2 = 4-7 3 = 7-10 4 = 10 or more

[1] No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescences.

[1] No. of nodes between later-developing inflorescences.

[2] Pubescence on younger stems: 1 = Smooth (no long hairs) 2 = Sparsely hairy (scattered long hairs) 3 = Moderately hairy 4 = Densely hairy or wooly

4. LEAF (mature leaf beneath the 3rd inflorescence):

[1] Type: 1 = Tomato 2 = Potato ('Trip-L-Crop')

[1] Morphology *(choose illustration on pg. 5 of this form that is most similar)*

[3] Margins of major leaflets: 1 = Nearly entire 2 = Shallowly toothed or scalloped 3 = Deeply toothed or cut, esp. towards base

[3] Marginal rolling or wiltiness: 1 = Absent 2 = Slight 3 = Moderate 4 = Strong

[2] Onset of leaflet rolling: 1 = Early-season 2 = Mid-season 3 = Late season

6

4. LEAF (mature leaf beneath the 3rd inflorescence -- continued):

[1] Surface of major leaflets: 1 = Smooth 2 = Rugose (bumpy or veiny)

[2] Pubescence: 1 = Smooth (no long hairs) 2 = Normal 3 = Hirsute 4 = Wooly

5. INFLORESCENCE (make observations on 3rd inflorescence):

[1] Type: 1 = Simple 2 = Forked (2 major axes) 3 = Compound (much branched)

[06] Number of flowers in inflorescence, average

[1] Leafy or "running" inflorescences: 1 = Absent 2 = Occasional 3 = Frequent

6. FLOWER:

[1] Calyx: 1 = Normal, lobes awl-shaped 2 = Macrocalyx, lobes large, leaflike 3 = Fleshy

[1] Calyx-lobes: 1 = Shorter than corolla 2 = Approx. equalling corolla 3 = Distinctly longer than corolla

[1] Corolla color: 1 = Yellow 2 = Old gold 3 = White or tan

[ ] Style pubescence: 1 = Absent 2 = Sparse 3 = Dense

[1] Anthers: 1 = All fused into tube 2 = Separating into 2 or more groups at anthesis

[1] Fasciation (1st flower of 2nd or 3rd inflorescence): 1 = Absent 2 = Occasionally present 3 = Frequently present

7. FRUIT (3rd fruit of 2nd or 3rd cluster): *For the first 5 characters below, match your variety with the most similar illustration on pg. 5 of this form.*

[10] Typical fruit shape:

[3] Shape of transverse section:

[1] Shape of stem end:

[2] Shape of blossom end:

[1] Shape of pistil scar:

---

[1] Abscission layer: 1 = Present (pedicellate) 2 = Absent (jointless)

[2] Point of detachment of fruit at harvest: 1 = At pedicel joint 2 = At calyx attachment

[15] mm length of pedicel (from joint to calyx attachment)

[060] mm length of mature fruit (stem axis)	[056]	mm length, check var. no.	[18]
[045] mm diameter of fruit at widest point	[048]	mm diameter, check var. no.	[18]
[069] g weight of mature fruit	[071]	g weight, check var. no.	[18]

[1] No. of locules: 1 = Two 2 = Three and four 3 = Five or more

[1] Fruit surface: 1 = Smooth 2 = Slightly rough 3 = Moderately rough or ribbed

[3] Fruit base color (mature-green stage): 1 = Light green ('Lanai', 'VF145-F5') 2 = Light gray-green ('Westover') 3 = Apple or medium green ('Heinz 1439 VF') 4 = Yellow green 5 = Dark green

[1] Fruit pattern (mature-green stage): 1 = Uniform green 2 = Green-shouldered 3 = Radial stripes on sides of fruit

[ ] Shoulder color if different from base: 1 = Dark green 2 = Grey green 3 = Yellow green

[5] Fruit color, full-ripe: 1 = White 2 = Yellow 3 = Orange 4 = Pink 5 = Red 6 = Brownish 7 = Greenish 8 = Other *(Specify)* _____

[3] Flesh color, full-ripe: 1 = Yellow 2 = Pink 3 = Red/Crimson 4 = Orange 5 = Other *(Specify)* _____

[1] Flesh color: 1 = Uniform 2 = With lighter and darker areas in walls

[2] Locular gel color of table-ripe fruit: 1 = Green 2 = Yellow 3 = Red

[2] Ripening: 1 = Blossom-to-stem end 2 = Uniform

7. FRUIT (3rd fruit of 2nd or 3rd cluster): Continued

[2] Ripening: 1 = Inside out 2 = Uniformly 3 = Outside in

[2] Epidermis color: 1 = Colorless 2 = Yellow

[1] Epidermis: 1 = Normal 2 = Easy-peel

[3] Epidermis texture: 1 = Tender 2 = Average 3 = Tough

[3] Thickness of pericarp . . . . . [3]

1 = Under 3 mm 2 = 3-6 mm 3 = 6-9 mm 4 = Over 9 mm

[1] Stem scar size: 1 = Small ('Roma') 2 = Medium ('Rutgers') 3 = Large

[1] Core: 1 = Coreless (absent or smaller than 6x6 mm) 2 = Present

Thickness of pericarp, check var. no. [1][8]

8. RESISTANCE TO FRUIT DISORDERS (Use code: 0 = Unknown, 1 = Susceptible, 2 = Resistant)

[0]	Blossom end rot	[2]	Catface	[2]	Fruit pox	[2]	Zippering
[0]	Blotchy ripening	[2]	Cracking, concentric	[2]	Gold fleck	[ ]	Other *(Specify)*
[0]	Bursting	[2]	Cracking, radial	[2]	Graywall		

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant). NOTE: If claim of novelty is based wholly or in substantial part upon disease resistance, trial data should be appended. These should specify the method of testing, the reaction of the application variety, and reaction of well-known check varieties grown in the trial (identified by name).

VIRAL DISEASES:

[0]	Cucumber mosaic	[0]	Tobacco mosaic, Race 0	[0]	Tobacco mosaic, Race 2^2
[0]	Curly top	[0]	Tobacco mosaic, Race 1	[0]	Tomato spotted wilt
[0]	Potato-Y virus	[0]	Tobacco mosaic, Race 2	[0]	Tomato yellows

[ ] Other virus *(Specify)* _____

BACTERIAL DISEASES:

[0]	Bacterial canker *(Corynebacterium michiganense)*	[0]	Bacterial spot *(Xanthomonas vesicatorium)*
[0]	Bacterial soft rot *(Erwinia carotovora)*	[0]	Bacterial wilt, *(Pseudomonas solanacearum)*
[1]	Bacterial speck *(Pseudomonas tomato)*	[ ]	Other bacterial disease *(Specify)* _____

FUNGAL DISEASES:

[0]	Anthracnose *(Colletotrichum* spp.*)*	[0]	Leaf mold, Race 1 *(Cladosporium fulvum)*
[1]	Brown root rot or corky root, *(Pyrenochaeta lycopersici)*	[0]	Leaf mold, Race 2
[0]	Collar rot or stem canker, *(Alternaria solani)*	[0]	Leaf mold, Race 3
[0]	Early blight defoliation, *(Alternaria solani)*	[ ]	Leaf mold, other races *(Specify)* _____
[2]	Fusarium wilt, Race 1, *(F. oxysporum f. lycopersici)*	[0]	Nailhead spot *(Alternaria tomato)*
[1]	Fusarium wilt, Race 2	[0]	Septoria leafspot *(S. lycopersici)*
[1]	Fusarium wilt, Race 3	[0]	Target leafspot *(Corynespora casiicola)*
[2]	Gray leaf spot *(Stemphylium* spp.*)*	[2]	Verticillium wilt, Race 1 *(V. albo-atrum)*
[0]	Late blight, Race 0, *(Phytophthora infestans)*	[0]	Verticillium wilt, Race 2
[0]	Late blight, Race 1	[2]	Other fungal disease Alternaria Stem Canker
		[2]	Other fungal disease Alternaria Black Mold

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant -- Continued)

INSECTS AND PESTS:

[0]	Colorado potato beetle *(Leptinotarsa decemlineata)*	[0]	Tomato hornworm *(Manduca quinquemaculata)*
[1]	Southern root knot nematode *(Meloidogyne incognita)*	[0]	Tomato fruitworm *(Heliothis zea)*
[0]	Spider mites *(Tetranychus spp.)*	[0]	Whitefly *(Trialeurodes vaporariorum)*
[0]	Sugar beet army worm *(Spodoptera exigua)*	[1]	Other *(Specify)* Aphid
[0]	Tobacco flea beetle *(Epitrix hirtipennis)*		

POLLUTANTS:

[0] Ozone [0] Sulfur dioxide [ ] Other *(Specify)* _____

10. CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS: Suggested test methods may be found in "Tomato Products," 5th ed., National Canners Assn. Bull. 27-L. Please specify test methods or give a reference to methods used. Fill in table below with values for the new variety and for at least one well-known check variety of similar type grown in the same trial. Specify names or numbers of check varieties.

	SUBMITTED VARIETY	Check Variety 18 UC82B	Check Variety 22 Cannery Row	Check Variety 23 Butte
	1988 ave 1989	1988 ave 1989	1988 ave 1989	1988 ave 1989
pH San Juan Bautista, CA	4.38 4.32 4.35	4.31 4.23 4.27	4.41 4.29 4.35	4.33 4.23 4.28
Titratable acidity, as % citric				
Total solids (dry matter, seeds and skin removed)				
Soluble solids, as °Brix San Juan Bautista	5.0 5.0 5.0	5.0 4.8 4.6	5.2 5.2 5.2	5.6 5.4 5.2

11. PHENOLOGY: Express length of developmental stages either as calendar days or as heat units (growing degree days), in degrees Celsius. If heat units are used, indicate the base temperature used in their calculation here _____ °C. See paper by Warnock under "References" for method. Give comparative data for at least one check variety; identify checks by name or by number from table on page 1.

	APPLICATION VARIETY	Check variety UC82B	Check variety Cannery Row	Check variety Butte
	SJB ave Wis	SJB ave Wis	SJB ave Wis	SJB ave Wis
Seeding to 50% flower (1 open flower on 50% of plants) 1988 + 1989	65,65 63,65 64.5 days	66,64 61,60 62.8 days	62,72 61,62 64.2 days	66,66 63,66 65.2 days
Seed to once-over harvest *(if applicable)*				

[4] Fruiting season: 1 = Long ('Marglobe') 2 = Medium ('Westover') 3 = Short, concentrated ('VF 145') 4 = Very concentrated ('UC 82')

[2] Relative maturity in areas tested: 1 = Early 2 = Medium early 3 = Medium 4 = Medium late 5 = Late 6 = Variable (if relative maturity is known to differ by location or environment, please explain on separate sheet).

12. ADAPTATION: If more than one category applies, list all in rank order.

[0] [1] Culture: 1 = Field 2 = Greenhouse

[4] [3] [2] [1] Principal use(s): 1 = Home garden 2 = Fresh market 3 = Whole-pack canning 4 = Concentrated products 5 = Other *(Specify)* _____

[2] Machine harvest: 1 = Not adapted 2 = Adapted

[10] [9] [1] [2] Regions to which adaptation has been demonstrated:
1 = Northeast 2 = Mid Atlantic 3 = Southeast 4 = Florida
5 = Great Plains 6 = South-central 7 = Intermountain West 8 = Northwest
9 = California: Sacramento and Upper San Joaquin Valley
10 = California: Coastal areas 11 = California: Southern San Joaquin Valley & deserts

9

VARIETY: PROMO, formerly FM-83568
EXHIBIT D: Additional Description of the Variety

The mature plant of Promo is compact determinate with dark green foliage like UC82B but with curly or rolled leaflets compared to the non-curly leaflets of UC82B. The main stem frequently terminates with the second inflorescence and most branches terminate with two inflorescences at adjacent nodes along with a single leaf. Branched inflorescences are produced occasionally. Promo consistently produces fewer flowers per 1st, 2nd and 3rd inflorescence than Cannery Row.

The mature fruit is elongated (half-long) with a length/diameter ratio of 1.34 compared to 1.35 for Cannery Row, 1.17 for UC82B and 1.16 for FM-6203. Promo is closely related to Cannery Row, but Promo has better foliage cover of the fruit, more concentrated maturity, and distinctly fewer stems retained on fruit shaken from the vine. It has similar soluble solids and pH to Cannery Row and FM-6203 but higher soluble solids and pH than UC82B. The fruit of Promo has much less hollow locule (puffyness) than FM-6203 or UC82B, and is distinctly firmer than non-puffy fruit of FM-6203 or UC82B. Each of the past 5 years Promo fruit has exhibited outstanding resistance to Alternaria Black Mold and cracking at San Juan Bautista, CA following late September and early October rains.

9000202

EXHIBIT "E"

Plant Variety Protection Application

No:

STATEMENT OF OWNERSHIP

I, George R. Allbritten, Secretary of Ferry-Morse Seed Company do hereby certify that Ferry-Morse Seed Company is the breeder and owner of that certain variety namely, Tomato, Promo

for which an application for Plant Variety Protection has been filed.

In witness whereof I have executed this statement of ownership and caused the Ferry-Morse Corporate Seal to be affixed this 7 day of May, 1990.

Secretary

SEAL

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